

Minutes, 10/06/04 Tevatron BPM Upgrade Meeting
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This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

1. Report from Bob and Steve
2. Report from subproject leaders
3. Report from Technical Coordinator -- Jim Steimel
4. AOB

1. Report from Bob and Steve.

- We'll meet next Monday at 11:00. Eric James, Jim Steimel and Gustavo Cancelo will report on their work with Echotek and filtering. If necessary, the discussion will continue to Thursday of next week.

2. Reports from L2 Managers

Tim Kasza:

- Tim gave a report on hardware deliveries/testing. Some of the information can be found in AD doc #1381 (Echotek board status and gain distribution of the first 18 boards) and AD doc #1397 (Filter measurements).

- The Echotek testing proceeds. 38 boards are in various stages of testing. Some of the boards have passed. Some boards fail but on power cycling they work. This needs to be further investigated to understand.

- Cables are arriving. So far some of the 4 inch and some of the unlabelled 6 foot cables have arrived. No testing has been done on the cables.

- 427 pairs of filters have arrived. Testing of 10% of the 400 pairs is proceeding (the 27 original pairs have already been tested). All 40 have passed the insertion loss and return loss portions of the test. Phase matching comes next.

Vince Pavlicek:

- The timing card intermittent interrupt problem has been solved by firmware changes. The TCLK decoding will be worked on next. Final layout changes are being made in preparation for production of the final

boards.

- The filter board PRR is out. The spreadsheets are coming.
- Working with DAWN on the software updates needed for the crate monitoring. There are some issues still to be resolved and progress will hopefully be made soon. The parts for the two original evaluation crates are coming.
- The test stand area is being reorganized a little by Neal Wilcer. Jim Steimel will work with Neal.
- We discussed the possibility of having approximately 130 filter boards made with the canonical 20/10 dB attenuation. The remaining 20 boards would be made with the filters and attenuation left off. The remaining assembly would be done at Fermilab. This gives us flexibility to use some of the filters for the commissioning and also to build the final boards with a different attenuation. There was some discussion of having more than 150 boards made and that will likely happen. The extra bare boards will be spares.

Luciano Piccoli:

- Now have 6 Echotek boards in a crate for rate tests. Achieved 400 Hz, later 430 Hz with 6 boards.
- Interrupt problem solved with firmware change.
- Timing board delay is (or will be) available through ACNET/W25 soon. Need to discuss with Brian.

Brian Hendricks:

- Continue working on modifications to libraries for the new system.
- Starting to think about SDA support. Although not required for commissioning it will become necessary at some point.

Rob Kutschke:

- Rob will start working on TeV BPM in about a week.

3. Technical Coordinator -- Jim Steimel

- The C service buildings are essentially ready for the TeV BPM crates. The electronics that was in the way moved up instead of down in the racks but it looks like the

TeV BPM equipment fits below it.

- Jim is making measurements using simulated beam signals (coalesced and uncoalesced, one, two, three, ... bunches) and will show results next week.

4. AOB.

- No meeting Thursday October 7.

- Plan to meet Monday October 11 at 11:00 to hear from Eric James, Jim Steimel and Gustavo Cancelo about Echotek/filtering.